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ART 34 AMDT

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C L A I M S

1. A process for combusting coke of a coke-containing FCC catalyst in a regeneration unit of a FCC unit comprising the introduction of oxygen-containing gas through a gas transport unit (7) into the regeneration unit (2) and combusting the coke means of an oxygen-containing gas, characterized in that the oxygen-containing gas is cooled in a cooling unit (8) before it is brought in contact with the coke-containing FCC catalyst.

2. The process according to claim 1 wherein the oxygen-containing gas is cooled before or during its stay in the gas transport unit.

3. The process according to claim 2 wherein the oxygen-containing gas is cooled before its stay in the gas transport unit.

4. The process according to any one of claims 1-3 wherein the oxygen-containing gas is air.

5. The process according to any one of claims 1-4 wherein the gas transport unit (7) is an air blower.

6. The process according to any one of claims 1-5 wherein cooling is performed in an industrial chiller (8).

7. A method for decreasing the thermal deactivation of a catalyst in an FCC regeneration process, characterized in that the regeneration process is performed by applying the process according to any one of claims 1-6.

8. A regenerator apparatus for performing the process according to claims 1-6 comprising inlet and outlet means (3, 4, 5, 14), and an inlet (6), wherein the apparatus

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further comprises a gas transport unit (7) located in or at inlet means (6) of the regenerator unit (2), and a cooling unit (8) in the transport unit or upstream the transport unit at its suction side.